Resident Research Rotation Opportunity

Name of Primary Investigator: David Westaway

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Location of Laboratory: Centre for Prions and Protein Folding Diseases

Laboratory website address: http://www.prioncentre.ca

Area of Research Interest: Molecular pathogenesis of Prion Disease, Alzheimer’s Disease

General Description of Potential Projects:

**Project 1:** The prion-like protein shadoo is a hypothesized as a genetic modifier of two forms of CJD. We will inoculate human CJD prions into mice with or without copies of the shadoo gene (*Sprn*) to see if Shadoo protein modulates these disease processes. *(Duration: 2 years)*

**Project 2:** Shadoo protein is putatively neuroprotective in the adult CNS and may lack cryptic “pro-pathogenic” properties of cellular PrP that come in to play in Alzheimer’s. By mix-and-match approaches of chimeric molecules we will map the biological properties of shadoo versus PrP. *(Duration: 1 year)*